



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

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COMMISSIONER

**Augusta East Redevelopment
Company, LLC
Kennebec County
Augusta, Maine
A-230-71-L-T/M (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Transfer/Minor Revision**

FINDINGS OF FACT

After review of the file and related materials submitted with regard to the above noted application, pursuant to Title 38, Maine Revised Statutes Annotated (M.R.S.A.), Section 590 and 06-096 Code of Maine Rules (CMR) 115 (as amended), the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Augusta East Redevelopment Company, LLC (AERC) has requested the transfer of Air Emission License A-230-71-K-R from MaineGeneral Medical Center to Augusta East Redevelopment Company, LLC through a letter to the Bureau of Air Quality dated January 9, 2015. Air Emission License A-230-71-K-R was issued to MaineGeneral Medical Center on October 24, 2011. The facility is a former hospital now being used as leased office space.

AERC has requested a minor revision to the license in order to allow the firing of natural gas in Boiler #3. In addition, AERC has no intention of firing #6 fuel oil in the future, therefore, the ability to fire #6 fuel oil in Boilers #1 and #2 will be removed.

The equipment addressed in this license is located at 6 East Chestnut Street in Augusta, Maine.

B. Emission Equipment

Boilers #1, #2 and #3 will remain as currently licensed; however, Boiler #3 will be licensed to fire natural gas and Boilers #1 and #2 will be licensed to fire only distillate fuel.

Boilers

| Equipment | Maximum Capacity (MMBTU/hr) | Maximum Firing Rate | Fuel Type | Installation Date | Stack # |
|-----------|-----------------------------|-----------------------------|---------------------------------------|-------------------|---------|
| Boiler #1 | 12.2 | 87.1 gal/hr | Distillate fuel, 0.5%S | 1964 | 1 |
| Boiler #2 | 12.6 | 90.0 gal/hr | Distillate fuel, 0.5%S | 1970 | 1 |
| Boiler #3 | 6.3 | 45.0 gal/hr 6,117 scf/hr | Distillate fuel, 0.5%S Natural Gas | 2007 | 1 |

C. Definitions

Distillate Fuel means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined in ASTM D975, kerosene, as defined in ASTM D3699, biodiesel as defined in ASTM D6751, or biodiesel blends as defined in ASTM D7467.

D. Application Classification

This transfer/minor revision will not increase emissions of any pollutant. Therefore, it has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended).

II. TRANSFER REQUIREMENTS

A. Title, Right, or Interest

In their application, AERC submitted copies of property deeds transferring ownership of the facility to AERC. The parties have provided sufficient evidence of title, right, or interest in the facility to allow the transfer of the facility's licenses.

B. Technical Capacity and Intent

AERC's acquisition of the facility is not expected to result in any significant change in the employees that currently operate the equipment, facilities, and conduct other activities. The facility's regulatory history with the MEDEP demonstrates that the environmental personnel are competent in air pollution control. The information submitted in the application provides sufficient evidence that AERC has the technical capacity and intent to comply with their air emission license.

C. Full Name and Address

The full name and address of the new owner is:

Augusta East Redevelopment Company, LLC
c/o Dirgio Capital Advisors, LLC
115 Water Street
Hallowell, ME
04347

D. Certification

AERC certifies that there will be no increase in air emissions beyond that provided for in the existing licenses, either in quantity or type.

III. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Boiler #3 – Addition of Natural Gas; Boilers #1 and #2 – Removal of #6 Fuel Oil

AERC operates Boilers #1, #2 and #3, manufactured in 1964, 1970 and 2007, respectively. Boilers #1 and #2 have the ability to fire distillate fuel and are also currently licensed to fire #6 fuel oil. AERC does not intend to fire #6 fuel in the boilers in the future, therefore #6 fuel will be removed from the license. Boiler #3 is currently license to fire distillate fuel, with AERC requesting to add natural gas as a licensed-allowed fuel. All three boilers vent to a common stack, designated Stack #1.

Due to either their size or date of manufacture/installation, none of the boilers are subject to the New Source Performance Standards (NSPS) 40 CFR Part 60,

Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBTU/hour manufactured after June 9, 1989.

1. BACT Findings

The emission limits for Boilers #1 and #2 when firing distillate fuel shall remain the same as licensed in air emission license A-230-71-K-R. SO₂ emission limits will now be based on the firing of distillate fuel only, rather than #6 fuel oil.

For Boiler #3, the BACT emission limits for the boilers when firing natural gas were based on the following:

| | |
|---------------------|--|
| PM/PM ₁₀ | 0.05 lb/MMBTU, 06-096CMR115, BACT determination |
| SO ₂ | 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 |
| NO _x | 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 |
| CO | 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 |
| VOC | 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 |
| Opacity | Previous BPT for common stack |

The BACT emission limits for Boiler #3 when firing natural gas are the following:

| Emission Unit | PM (lb/hr) | PM ₁₀ (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|-------------------------|---------------|-----------------------------|----------------------------|----------------------------|---------------|----------------|
| Boiler #3 – Natural Gas | 0.32 | 0.32 | 0.01 | 0.61 | 0.51 | 0.03 |

Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a continuous three-hour period, as set forth in Air Emission License A-230-71-K-R.

Boilers #1, #2, and #3 shall continue to be limited to the fuel-use equivalent total of 60,000 MMBTU/year of heat input, on a twelve-month rolling total basis, as licensed in Air Emission License A-230-71-K-R. The annual limit allows AERC to use any combination of licensed fuels. Records of the type of fuel used, amounts fired, the corresponding heat content of the fuels, and the facility's heat input shall continue to be maintained on a monthly and twelve-month rolling total basis.

2. 40 CFR Part 63 Subpart JJJJJ

Boilers #1, #2 and #3 are still subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). The boilers are all considered to be existing oil boilers, since all of the boilers will continue to be licensed to fire #2 fuel oil, as well as natural gas for Boiler #3. The 40 CFR Part 63 Subpart JJJJJ requirements are set forth in Air Emission License A-230-71-K-R.

C. Annual Emissions

AERC shall be restricted to the following annual emissions, based on a twelve-month rolling total:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

| Equipment | PM | PM ₁₀ | SO ₂ | NO _x | CO | VOC |
|----------------------|-----|------------------|-----------------|-----------------|-----|-----|
| Boiler #1, #2 and #3 | 6.0 | 6.0 | 15.1 | 9.0 | 1.1 | 0.2 |
| Generator #1 | 0.1 | 0.1 | 0.2 | 2.7 | 0.6 | 0.2 |
| Generator #2 | 0.2 | 0.2 | 0.5 | 5.0 | 1.3 | 0.5 |
| Total TPY | 6.3 | 6.3 | 15.8 | 16.7 | 3.0 | 0.9 |

The tons per year limits were calculated based on AERC being limited to 60,000 MMBTU/year of fuel use in boilers #1, #2 and #3, based on a twelve-month rolling total.

Annual SO₂ emissions have been reduced from those listed in Air Emission License A-230-71-K-R as a result of removing the ability to fire #6 fuel oil. Worst-case emission rates are now based on firing distillate fuel.

3. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, ACEC is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

ORDER

Based on the above, the Department concludes that the applicant for the air emission license transfer has the capacity to satisfy all applicable statutory criteria and hereby APPROVES the transfer of Air Emission License A-230-71-L-T/M, from MaineGeneral Medical Center to Augusta East Redevelopment Company, LLC, subject to all conditions attached to them.

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment (BPT),
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-230-71-L-T/M subject to the conditions found in Air Emission License A-230-71-K-R, and in the following conditions:

The following shall replace Condition (16)A of existing Air Emission License A-230-71-K-R:

(16) Boilers #1, #2 and #3

A. Fuel

1. Total fuel use for Boilers #1, #2 and #3 shall not exceed the equivalent of 60,000 MMBtu/year of distillate fuel and natural gas combined, based on a twelve-month rolling total basis.
2. Prior to July 1, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired in the boiler shall have a maximum sulfur content of 0.5% by weight. [06-096 CMR 115, BPT]

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3. Beginning July 1, 2016 or on the date specified in 38 MRSA §603-A(2)(A)(3), the facility shall fire distillate fuel with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
4. Beginning January 1, 2018 or on the date specified in 38 MRSA §603-A(2)(A)(3), the facility shall fire distillate fuel with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and twelve-month rolling total basis. [06-096 CMR 115, BPT]

The following shall replace Condition (16)C of existing Air Emission License A-230-71-K-R:

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

| Equipment | PM (lb/hr) | PM ₁₀ (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|-------------------------|---------------|-----------------------------|----------------------------|----------------------------|---------------|----------------|
| Boiler #1 – Distillate | 2.44 | 2.44 | 6.14 | 3.66 | 0.41 | 0.02 |
| Boiler #2 – Distillate | 2.52 | 2.52 | 6.35 | 3.78 | 0.42 | 0.02 |
| Boiler #3 – Distillate | 0.50 | 0.50 | 3.20 | 1.89 | 0.23 | 0.02 |
| Boiler #3 – Natural Gas | 0.32 | 0.32 | 0.01 | 0.61 | 0.51 | 0.03 |

DONE AND DATED IN AUGUSTA, MAINE THIS 17 DAY OF April, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

Marc Allen Robert Corne for
PATRICIA W. AHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 8, 2014

Date of application acceptance: January 9, 2015

Date filed with the Board of Environmental Protection:

This Order prepared by Kevin J. Ostrowski, Bureau of Air Quality

